

## Process Sheet

DAR001 Dart Helicopters Services

Ultimate Number : 29095  
P.O. Number : 12347  
This Issue : N/A  
Prsht Rev. : 10/23/2006  
First Issue : NC  
Previous Run : N/A  
Written By :  
Checked & Approved By :  
Comment :  
S.O. No. : N/A  
Type : LANDING GEAR  
Est Rev: 05.09.01 Add holes for compatibility with Bell  
Skidtubes KJJ/JLM

Drawing Name : 206B FWD X-TUBE

Part Number : D206667201  
Drawing Number : D206-667-241 REVB  
Project Number : N/A  
Drawing Revision : B  
Material : N/A  
Due Date : 11/15/2006  
Qty:

## Additional Product

Job Number:



Seq. #:

Machine Or Operation:

1.0

DC

Description :

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL



Photocopy bluefile and create labels as per PPP D206-667-201 CHG002

2.0

D6003102

Crosstube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part number

Description Batch

1 D6003-102

Crosstube

Check OD = 2.250"; ID = 1.380"

25663



3.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE



1-Fill tube with sand &amp; install plugs DT8534 on both ends as per Folio FA084

2-Turn first side as per Folio FA084

3-Deburr &amp; Inspect for surface damage. Repair damage within limits as per Dwg D206-667-241

4.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET



MS 06/10/24

# WORK ORDER CHANGES

W/O:			By	Date	Qty	Appr Chief Eng / Prod Mgr	QC Inspector
DATE	STEP	PROCEDURE CHANGE					

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE (NCR)

NCR:		Description of NC Section A	Corrective Action Section B		Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
DATE	STEP		Initial Chief Eng	Action Description Chief Eng				

NOTE: Date & initial all entries

Date: Monday, 10/23/2006 12:00:44 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 29095

Part Number: D206667201

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA084

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-241.

3-Polish entire outside surface of crosstube *pm 06-11-2 ①*

4-Remove sand and plugs

5-Scribe part # and batch # using vibrating stylus as per Dwg D206-667-241

Inside of Cuff(Donot engrave on outside of tube)

*MS 06/10/25*

6.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

*MS 06/10/25*

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*MS 06/11/02*

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1 *M-E 06/11/02*

*0*

9.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per Dwg D206-667-241 using CNC bender program 206B-AF and Folio FT

*DP6-11-8*

10.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

*1612-05*

11.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1Drill pilot holes (3/16") as per Dwg D206-667-241 using drill Jig DT8575 & DT8576

*RT 07-01-16*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 10/23/2006 12:00:44 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 29095

Part Number: D206667201

Job Number:



Seq. #:

Machine Or Operation:

Description :

2-Drill & ream holes as per Dwg D206-667-241 using drill Jig DT8575 & DT8576.

3-Flip tube and switch drilling Jigs from right to left, left to right. Locate tube using "T" pins off holes drilled in previous step.

4-Drill pilot holes (3/16") as per Dwg D206-667-241 using drill Jig DT8575 & DT8576

5-Drill & ream holes as per Dwg D206-667-241 using drill Jig DT8575 & DT8576. Check dimensions between holes on all four sides to ensure proper alignment. Use DT8583 & 8584 SUPPORT Jigs.

6-Drill rivet holes as per Dwg D206-667-241 using drill Jig DT8788

7-C'sink holes as per Dwg D206-667-241

8-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-241

IT  
07-01-16

JP  
JP 7-1-16 ①

12.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

IT / JP 7-1-16 ①

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

JP 07-01-18 ①

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

JP 07-01-18 ①

15.0

OUTSIDE SERVICE

OUTSIDE SERVICES



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038Or

Issue P/O: 2890

LPI as per ASTM 1417

Level 2 Attach copy of NDT results to work order

JP 07-01-18 ①

16.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage

Ensure copy of NDT results attached to work order.

JP 7/10/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 10/23/2006 12:00:44 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 29095

Part Number: D206667201

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC6

DIMENSIONAL CHECK

QS



0701220



Comment: Inspect for damage & ensure results are as per Dwg D206-667-103

18.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Mask Threaded holes

N/A

2-Prime inside and outside crosstube as per QSI 005 4.2

ML 07.0125

(1)

3-Paint outside crosstube with White Imron as per QSI 005 4.2

ML 07.0131

(1)

19.0

QC14

Inspect Spray Paint



070201



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

20.0

D2856400

Abrasion Strip



Comment: Qty.: 1.3525 f(s)/Unit Total : 1.3525 f(s)

Pick:

Qty Part number Description Batch

2 D2856-400(Cut to 7.73") Abrasion Strip

B29285

RT 07-02-21

21.0

D28911

Support 2.25 dia



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2891-1 Support

B29086

RT 07-02-21

22.0

MS2192020

Clamp (per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-20

Clamp

M102440

RT 07-02-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries



Date: Monday, 10/23/2006 12:00:44 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 29095

Part Number: D206667201

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips as per QSI 035 using DT8579.

2-Install supports and clamps as per Dwg D206-667-241. Torque clamps to 80-100 in lb

ET 07-07-24

24.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07-03-07

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

MF. 07-03-09

26.0

AN532A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

m103287

MF. 07-03-09

27.0

D2872043

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2872-043

Nut Plate

B 24151

MF. 07-03-09

28.0

D2872045

Nut Plate Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2872-045

Nut Plate

B 24152

MF. 07-03-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 10/23/2006 12:00:45 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 29095

Part Number: D206667201

Job Number:



Seq. #:

Machine Or Operation:

Description :

29.0

AN510A

Bolt



Comment: Qty.: 10.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:Packing Kit

Qty Part number

Description Batch

10 AN5-10A

Bolt m103389 X

MF.

07-03-09

30.0

AN530A

BOLT



Comment: Qty.: 10.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:Packing Kit

Qty Part number

Description Batch

10 AN5-30A

Bolt m102083 X

MF.

07-03-09

31.0

AN960JD516

Washer



Comment: Qty.: 20.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:Packing Kit

Qty Part number

Description Batch

20 AN960JD516

Washer m102929 X

MF.

07-03-09

32.0

MS21042L5

Nut



Comment: Qty.: 10.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:Packing Kit

Qty Part number

Description Batch

10 MS21042L5

NUT m100564 X

MF.

07-03-09

33.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

*Eff Bos 7/3/13*

*50 Cc 7/3/13*

34.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-667-201

Location:

PPP Rev: B

*Cc 7/3/13*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: 12 Date: 07/03/14  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 10/23/2006 12:00:45 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 29095

Part Number: D206667201

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

QC21

FINAL INSPECTION/W/O RELEASE



①

Comment: FINAL INSPECTION/W/O RELEASE

SP07/03/14

Job Completion



U 07.03.14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 29095
<b>Description:</b> Crosstube Assembly		<b>Part Number:</b> D206-667-241
<b>Inspection Dwg:</b> D206-667-241 <b>Rev:</b> B		<b>Page 1 of 1</b>

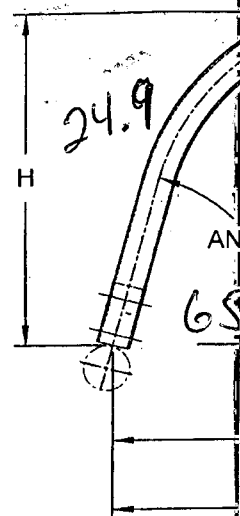
### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

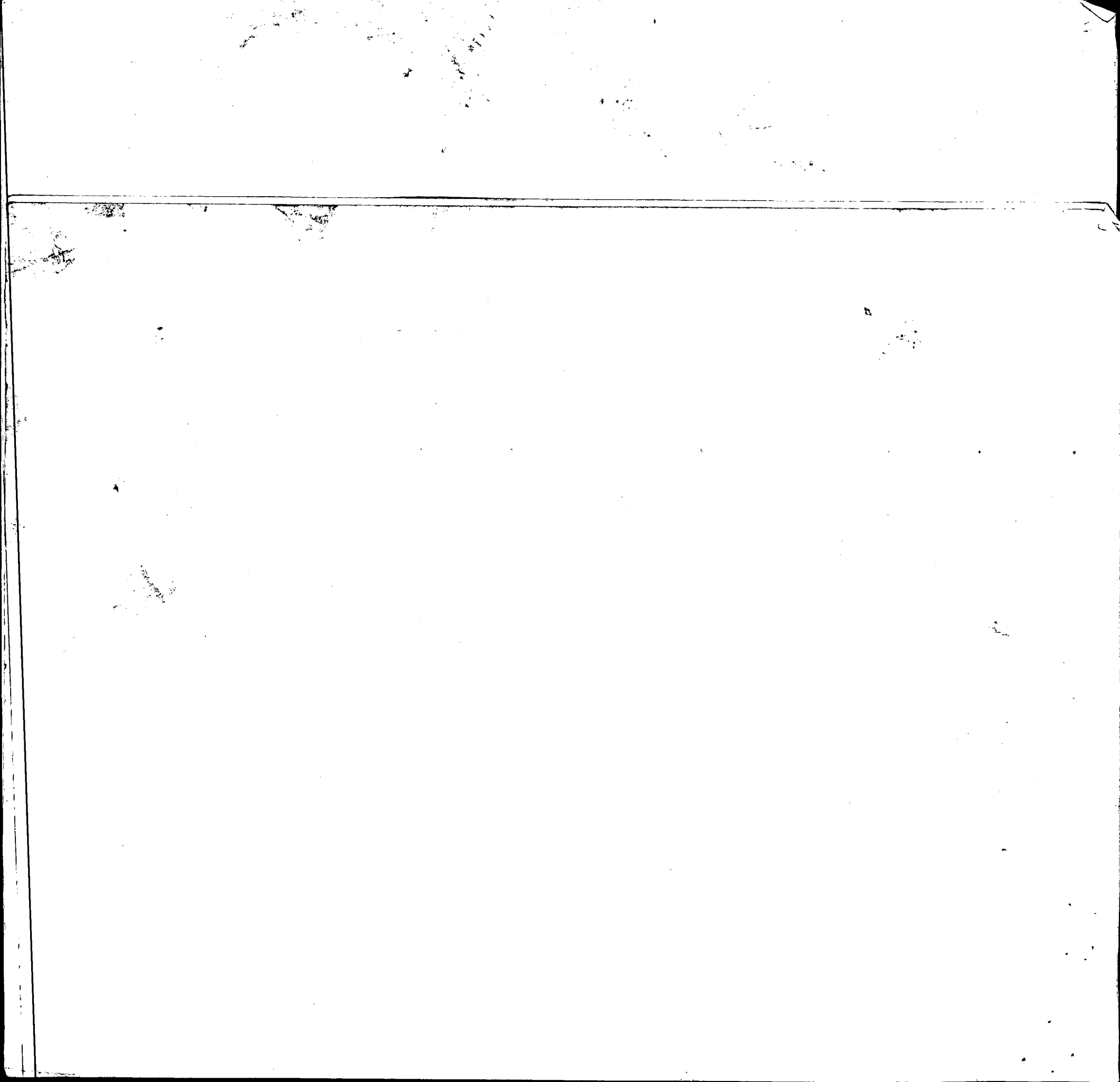
Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	30° x 0.500	+/-0.010	.500	✓		
	0.250	+/-0.010	.250	✓		
	2.240	+0.005/-0.000	2.244	✓		
	4.438	+/-0.030	4.440	✓		
	1.780	+0.005/-0.000	1.784	✓		
	R0.063	+/-0.010	.063	✓		
	1.851	+0.005/-0.000	1.854	✓		
	1.928	+0.005/-0.000	1.932	✓		
	2.005	+0.005/-0.000	2.009	✓		
	2.082	+0.005/-0.000	2.086	✓		
	2.159	+0.005/-0.000	2.163	✓		
	2.190	+0.005/-0.000	2.193	✓		
SIDE B	30° x 0.500	+/-0.010	.500	✓		
	0.250	+/-0.010	.250	✓		
	2.240	+0.005/-0.000	2.244	✓		
	4.438	+/-0.030	4.440	✓		
	1.780	+0.005/-0.000				
	R0.063	+/-0.010	.063	✓		
	1.851	+0.005/-0.000	1.855	✓		
	1.928	+0.005/-0.000	1.933	✓		
	2.005	+0.005/-0.000	2.009	✓		
	2.082	+0.005/-0.000	2.087	✓		
	2.159	+0.005/-0.000	2.164	✓		
	2.190	+0.005/-0.000	2.194	✓		
	100.60	+/-0.020	100.60	✓		

<b>Measured by:</b> MB	<b>Audited by:</b> JG	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 06/10/25	<b>Date:</b> 06/11/02	<b>Date:</b>	N/A

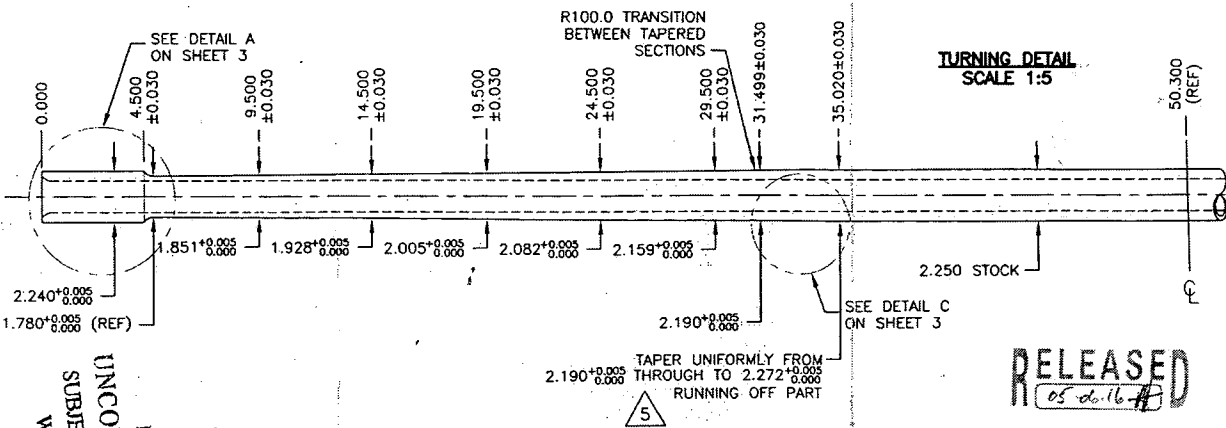
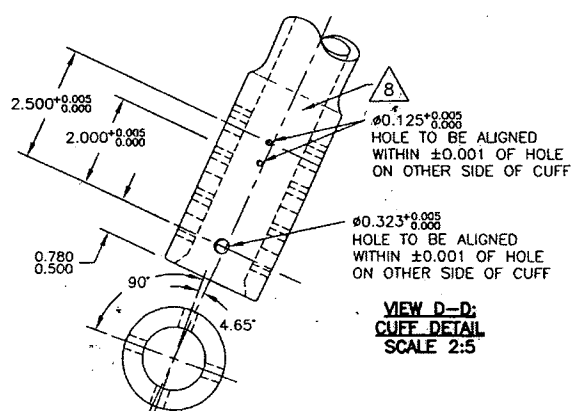
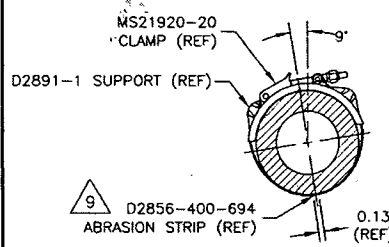
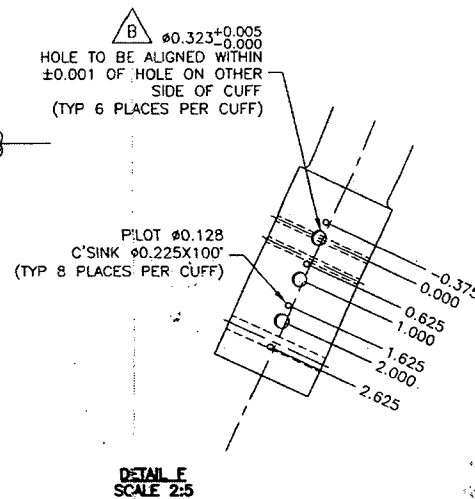
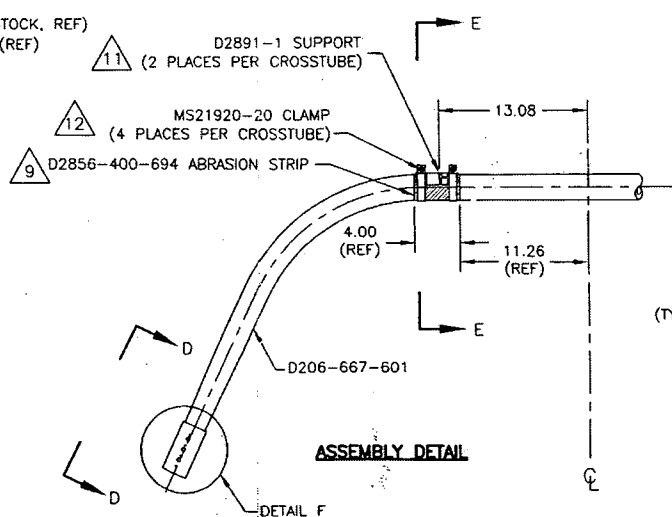
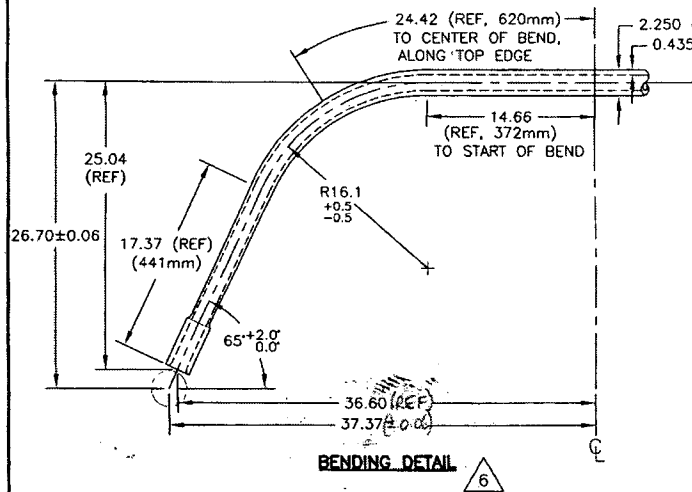
Rev	Date	Change	Revised by	Approved
A	06.10.16	New Issue (P/O D206-667-201)	KJ/JLM	BE



PART N  
BATCH N  
DR  
1/  
TOTAL







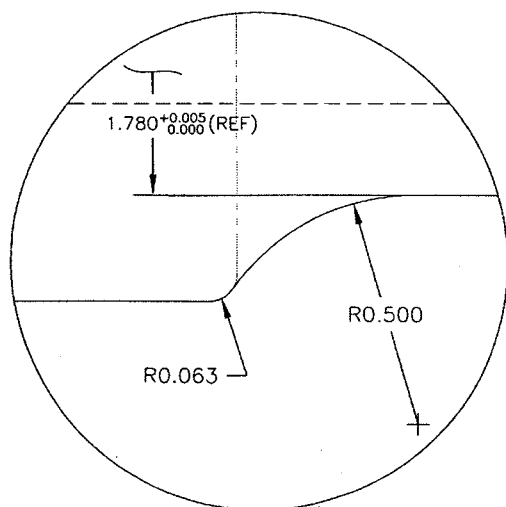
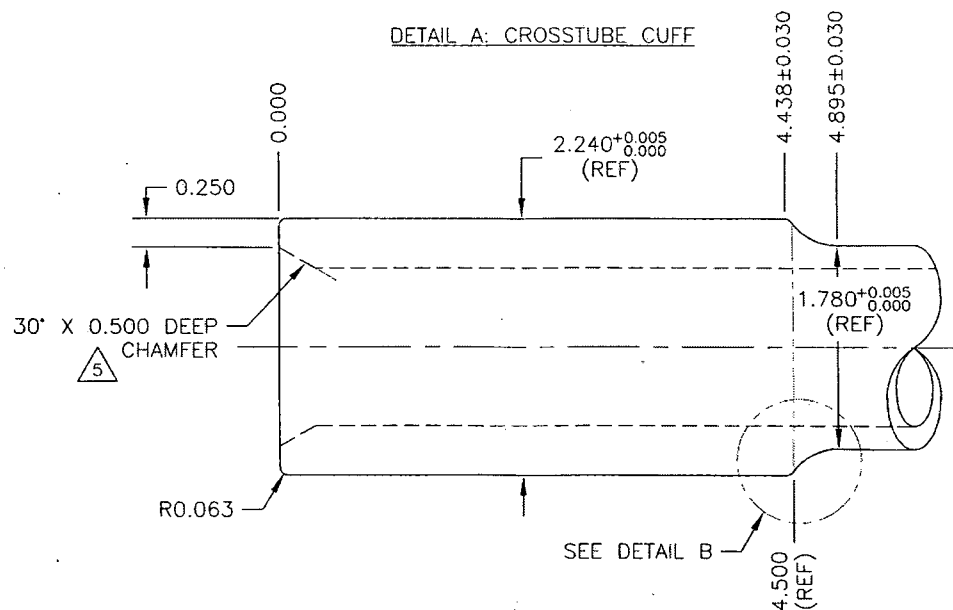
NO. 29095  
WORK ORDER  
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

RELEASED  
05.02.04

COPYRIGHT © 2000 BY DART AEROSPACE LTD.		DESIGN AH	DRAWN BY AH	<b>DART</b>	DART AEROSPACE LTD. HAMMERSLEY, ONTARIO, CANADA
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED #	APPROVED #	DRAWING NO. D206-667-241	REV. B SHEET 2 OF 3
DATE 05.02.04		TITLE CROSSTUBE ASS'Y (206B HIGH AFT)		SCALE 1:10	

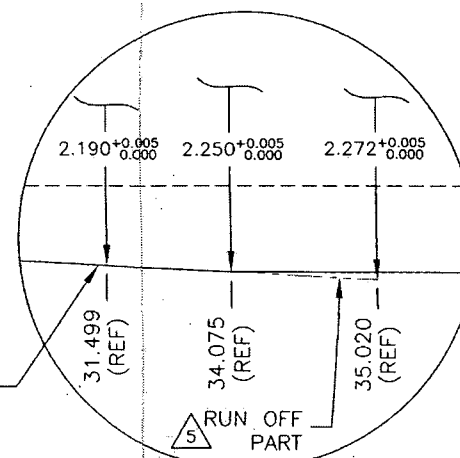
RELEASED  
05-06-16-4

DETAIL A: CROSSTUBE CUFF



DETAIL B: CUFF  
TRANSITION  
SCALE 4:1

DETAIL C:  
TAPER RUN-OFF  
NOT TO SCALE



NO. 24095  
WORK ORDER  
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THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	PH	APPROVED	PH	
DATE		05.02.04		DRAWING NO.		D206-667-241
TITLE		CROSSTUBE ASS'Y (206B HIGH AFT)		REV. B		SHEET 3 OF 3
SCALE		1:1				





# HeathAir

INTERNATIONAL (1991) INC.

681 Ave. Lepine, Dorval, Québec H9P 1G3  
Tél.: (514) 636-1000 • Fax: (514) 636-0031

W.O. N° 35593

A.M.O. Number: 46/90

## NON-DESTRUCTIVE TESTING REPORT

### AIRCRAFT / COMPONENT INFORMATION

REGISTRATION:

MODEL/TYPE:

SERIAL NUMBER:

TOTAL HR/LDG:

OPERATED BY:

BASED AT:

### INSPECTION REQUIREMENTS

Carry out FPI of six (6) cross tubes (external surface) as per ASTM E-1417-05 and the Dart QSI 038, Section 4.1.1 (on file at client) - parts delivered to HeathAir.

Qty. (4) P/N D212-664-201 S/N's B28762, B27627, B27990 & B27988

Qty. (1) P/N D206-667-201 S/N B29095

Qty. (1) P/N D206-667-203 S/N B28978

☐ RADIOGRAPHY

☐ ULTRASONIC

☒ PENETRANT

☐ MAGNETIC PARTICLE

☐ EDDY CURRENT

### INSPECTION REPORT

Fluorescent penetrant inspection was performed in accordance with the above requirements on six (6) cross tubes.

Note: A Level 3 penetrant was substituted for the requested Level 2 (3 is more sensitive)  
Ardrox 970P25E Batch #04B503.

Six (6) cross tubes PASSED inspection.

THE MAINTENANCE DESCRIBED ABOVE HAS BEEN PERFORMED IN ACCORDANCE WITH  
THE APPLICABLE STANDARDS OF AIRWORTHINESS

INSPECTED BY: \_\_\_\_\_

DATE January 18, 2007

INSPECTION STAMP(S) Not Required

### CUSTOMER INFORMATION

CUSTOMER: Dart Aerospace

P.O. NUMBER

2890

ADDRESS:

CONTACT NAME:

LABOUR	@	\$
MATERIALS	@	
TRAVEL EXPENSES	@	GST
HOTEL EXPENSES	@	PST

INVOICE NO.

TOTAL \$

WHITE COPY - INSPECTION FILE • YELLOW COPY - CUSTOMER • PINK COPY - ACCOUNTANT